

AMENDMENTS TO THE SPECIFICATION:

Page 1, line 3, insert the following heading:

--BACKGROUND OF THE INVENTION--;

Page 1, between lines 27 and 28, insert the following heading:

--SUMMARY OF THE INVENTION--.

Page 4, between lines 27 and 8, insert the following heading:

--BRIEF DESCRIPTION OF THE DRAWINGS--.

Page 5, between lines 18 and 19, insert the following new paragraph and heading:

--Figure 7 represents a block diagram of the device according to the invention.

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENTS--.

Please replace the paragraph beginning at page 5, line 22, with the following rewritten paragraph:

--In Figure 1, a three-dimensional seismic matrix is obtained by reading measurements recorded by geophones G_{ij} disposed on a network x,y at coordinate points i,j . The reading of the sampled measurements time-wise is represented along a descending axis t representative of the depth or of a vertical descent from the surface of the ground or the sea. The measurements are characterized by their amplitude, for example an amplitude read by the geophone $[[G^{ij}]]$ G_{ij} at the time or at the

sampling depth t_k . The discrete measurement carried out by the geophone G_{ij} as to time or depth t_k is called the seismic amplitude $S_{ij,k}$.--

Page 12, between lines 25 and 26, insert the following new paragraph:

--A device 10 for practicing a process according to the invention includes means to use as optimum offset of two adjacent continuous local seismic traces, the value of offset rendering maximum their correlation function, means to take as conditional neighborhood of a "central" continuous local seismic trace $S_{ij,k}(t)$ the sub-neighborhood consisting in adjacent traces $S_{pq,k}(t)$ corresponding to optimum offsets associated with correlations $R_{ij,pq,k}(h)$ greater than a predetermined threshold comprised between 0 and 1, means to define for each continuous local seismic trace $S_{pq,k}(t)$ of the conditional neighborhood a value of residual relative to said "central" continuous local seismic trace $S_{ij,k}(t)$ comprising parametric coefficients, and means to determine the parametric coefficients by minimization of the set of residuals on the conditional neighborhood. --